FIGURE 1

Human Coch-5B2 cDNA Sequence

1 GCACTCGGGC GCAGCCGGGT GGATCTCGAG CAGGTGTGAG
CAGCCTATCA GTCACCATGT CCGCAGCCTG GATCCCGGCT CTCGGCCTCG
GTGTGTGTCT GCTGCTGCTG CCGGGGCCCG CGGGCAGCGA GGGAGCCGCT
CCCATTGCTA TCACATGTTT TACCAGAGGC TTGGACATCA GGAAAGAGAA
AGCAGATGTC CTCTGCCCAG GGGGCTGCCC TCTTGAGGAA TTCTCTGTGT
ATGGGAACAT AGTATATGCT TCTGTATCGA GCATATGTGG GGCTGCTGTC
CACAGGGGAG TAATCAGCAA CTCAGGGGGA CCTGTACGAG TCTATAGCCT
ACCTGGTCGA GAAAACTATT CCTCAGTAGA TGCCAATGGC ATCCAGTCTC
AAATGCTTTC TAGATGGTCT GCTTCTTTCA CAGTAACTAA AGGCAAAAGT
AGTACACAGG AGGCCACAGG ACAAGCAGTG TCCACAGCAC ATCCACCAAC
AGGTAAACGA CTAAAGAAAA CACCCGAGAA GAAAACTGGC AATAAAGATT
GTAAAGCAGA CATTGCATTT CTGATTGATG GAAGCTTTAA TATTGGGCAG
CGCCGATTTA ATTTACAGAA GAATTTTGTT GGAAAAGTGG CTCTAATGTT
GGGAATTGGA ACAGAAGGAC CACATGTGGG CCTTGTTCAA GCCAGTGAAC
ATCCCAAAAT AGAATTTTAC TTGAAAAACT TTACATCAGC CAAAGATGTT
TTGTTTGCCA TAAAGGAAGT AGGTTTCAGA GGGGGTAATT CCAATACAGG
AAAAGCCTTG AAGCATACTG CTCAGAAATT CTTCACGGTA GATGCTGGAG
TAAGAAAAGG GATCCCCAAA GTGGTGGTGG TATTTATTGA TGGTTGGCCT
TCTGATGACA TCGAGGAAGC AGGCATTGTG GCCAGAGAGT TTGGTGTCAA
TGTATTTATA GTTTCTGTGG CCAAGCCTAT CCCTGAAGAA CTGGGGATGG
TTCAGGATGT CACATTTGTT GACAAGGCTG TCTGTCGGAA TAATGGCTTC
TTCTCTTACC ACATGCCCAA CTGGTTTGGC ACCACAAAAT ACGTAAAGCC
TCTGGTACAG AAGCTGTGCA CTCATGAACA AATGATGTGC AGCAAGACCT
GTTATAACTC AGTGAACATT GCCTTTCTAA TTGATGGCTC CAGCAGTGTT
GGAGATAGCA ATTTCCGCCT CATGCTTGAA TTTGTTTCCA ACATAGCCAA
GACTTTTGAA ATCTCGGACA TTGGTGCCAA GATAGCTGCT GTACAGTTTA
CTTATGATCA GCGCACGGAG TTCAGTTTCA CTGACTATAG CACCAAAGAG
AATGTCCTAG CTGTCATCAG AAACATCCGC TATATGAGTG GTGGAACAGC
TACTGGTGAT GCCATTTCCT TCACTGTTAG AAATGTGTTT GGCCCTATAA
GGGAGAGCCC CAACAAGAAC TTCCTAGTAA TTGTCACAGA TGGGCAGTCC
TATGATGATG TCCAAGGCCC TGCAGCTGCT GCACATGATG CAGGAATCAC
TATCTTCTCT GTTGGTGTGG CTTGGGCACC TCTGGATGAC CTGAAAGATA
TGGCTTCTAA ACCGAAGGAG TCTCATGCTT TCTTCACAAG AGAGTTCACA
GGATTAGAAC CAATTGTTTC TGATGTCATC AGAGGCATTT GTAGAGATTT
CTTAGAATCC CAGCAATAAT GGTAACATTT TGACAACTGA AAGAAAAAGT
ACAAGGGGAT CCAGTGTGTA AATTGTATTC TCATAATACT GAAATGCTTT
AGCATACTAG AATCAGATAC AAAACTATTA AGTATGTCAA CAGCCATTTA
GGCAAATAAG CACTCCTTTA AAGCCGCTGC CTTCTGGTTA CAATTTACAG
TGTACTTTGT TAAAAACACT GCTGAGGCTT CATAATCATG GCTCTTAGAA
ACTCAGGAAA GAGGAGATAA TGTGGATTAA AACCTTAAGA GTTCTAACCA
TGCCTACTAA ATGTACAGAT ATGCAAATTC CATAGCTCAA TAAAAGAATC

FIGURE 1 (CONTINUED)

TGATACTTAG ACCAAAAGCA ACATTCGTTC TCTAACCATT CTGTATTGAT
TATATAAGCA AAATGAAAAG AGAAACTTAA ATGAACACAG CTCTTTAACA
TGGTTCAGGT ACACATATTT TGACCCAAGT GGATATTTTC TTAAAACCAA
TCAATAATAG CTAGCTATTA CTGCAGACTA TAAAATCTGG ATATAGAAAG
GAGACCTGTA TCAAACTGCT TTTGTAGTGT GTTTTCATAA CAACTTATGA
CTAAAAATAT CACACTGAAT AAGAGAGCAG GATTGCCAGG TATTTTTCTA
TTTCTCTCCT TAATTTTATA TGTATATAGA TATATTTGGC TTATATTCTA
AGTCACCTAA GTACTTAAAA GTTAAGTTGG TAAAGTATTT ACTGACTGCT
TATAAACATT TAAAGACAAA GACATTTCAA ATAACTGCAG AAAAAATATT
GTAGTTTGAA TATTTAAGCA ATAAAACTGC TAGTGAGTTA TTGT

Human Coch-5B2 Amino Acid Sequence

1 MSAAWIPALG LGVCLLLLPG PAGSEGAAPI AITCFTRGLD IRKEKADVLC

PGGCPLEEFS VYGNIVYASV SSICGAAVHR GVISNSGGPV RVYSLPGREN

YSSVDANGIQ SQMLSRWSAS FTVTKGKSST QEATGQAVST AHPPTGKRLK

KTPEKKTGNK DCKADIAFLI DGSFNIGQRR FNLQKNFVGK VALMLGIGTE

GPHVGLVQAS EHPKIEFYLK NFTSAKDVLF AIKEVGFRGG NSNTGKALKH

TAQKFFTVDA GVRKGIPKVV VVFIDGWPSD DIEEAGIVAR EFGVNVFIVS

VAKPIPEELG MVQDVTFVDK AVCRNNGFFS YHMPNWFGTT KYVKPLVQKL

CTHEQMMCSK TCYNSVNIAF LIDGSSSVGD SNFRLMLEFV SNIAKTFEIS

DIGAKIAAVQ FTYDQRTEFS FTDYSTKENV LAVIRNIRYM SGGTATGDAI

SFTVRNVFGP IRESPNKNFL VIVTDGQSYD DVQGPAAAAH DAGITIFSVG

VAWAPLDDLK DMASKPKESH AFFTREFTGL EPIVSDVIRG ICRDFLESQQ

551 *

FIGURE 2

Mouse Coch-5B2 cDNA Sequence

1 CGGAGCCGCG CTTGCCGCAC TCGGGTGTAG CCGGGCGGAT
CCCACGCAGG TCCACGGAGA TCCTCGCCAT GCCCTCGTCC AGGATCCCTG
CTCTCTGCCT CGGTGCGTGG CTGCTGCTGC TGCTGCTGCC CCGGTTCGCG
CGCGCCGAGG GAGCGGTTCC CATTCCTGTC ACCTGCTTTA CCAGAGGCCT
GGATATCCGA AAAGAGAAAG CAGATGTTCT CTGCCCAGGA GGCTGCTCTC
TTGAGGAATT CTCTGTGTTT GGGAACATAG TGTATGCGTC AGTGTCCAGC
ATCTGCGGCG CTGCTGTCCA TAGGGGAGTG ATTGGCACCT CAGGGGGACC
TGTGCGTGTC TACAGCCTTC CTGGTCGAGA GAACTACTCC TCGGTAGATG
CCAACGGCAT CCAGTCTCAG ATGCTTTCCC GATGGTCCGC GTCCTTCGCT
GTGACCAAAG GCAAAAGCAG TACCCAGGAA GCCACAGGAC GGGCAGTGTC
CACAGCCCAC CCACCTTCAG GTAAAAGACT AAAGAAGACA CCAGAGAAGA
AGACTGGCAA CAAAGACTGT AAGGCAGACA TTGCATTTCT CATTGATGGA
AGCTTCAATA TTGGGCAGCG CCGATTTAAT TTGCAGAAGA ATTTTGTTGG
GAAAGTGGCA CTAATGTTGG GAATTGGAAC AGAAGGACCA CACGTGGGTC
TCGTTCAAGC CAGTGAACAC CCCAAAATAG AATTTTACTT GAAAAACTTT
ACTTCAGCCA AAGATGTCTT GTTTGCCATA AAAGAAGTAG GTTTCCGAGG
GGGTAACTCC AACACAGGAA AAGCCTTGAA GCACACTGCT CAGAAATTCT
TTACAGCAGA CACTGGTGTG AGAAAAGGAA TACCAAAAGT GGTGGTAGTG
TTTATTGATG GTTGGCCCTC TGATGACATT GAGGAAGCAG GCATTGTGGC
CAGAGAGTTT GGTGTCAATG TATTTATAGT TTCTGTGGCC AAGCCCATTC
CTGAAGAACT GGGGATGGTT CAAGATGTTG CATTTGTTGA CAAGGCTGTG
TGTCGGAATA ATGGCTTCTT CTCTTATCAC ATGCCCAACT GGTTTGGCAC
TACAAAATAT GTGAAGCCTC TGGTGCAGAA GCTCTGTACG CACGAACAGA
TGATGTGCAG CAAAACCTGC TACAACTCAG TGAACATTGC CTTTCTGATT
GACGGCTCCA GCAGTGTTGG AGATAGCAAT TTCCGCCTCA TGCTAGAATT
TGTTTCTAAC ATAGCGAAGA CATTTGAAAT CTCAGACATT GGAGCCAAGA
TAGCTGCTGT ACAGTTCACT TATGACCAGC GCACCGAGTT CAGTTTCACT
GACTATAATA CCAAAGAGAA CGTCCTAGCT GTCCTAGCGA ACATCCGCTA
CATGAGTGGT GGCACAGCTA CTGGTGATGC CATCGCCTTT ACTGTTAGAA
ATGTATTTGG TCCCATAAGG GACAGCCCCA ACAAAAACTT CCTGGTTATT
GTCACAGATG GGCAGTCCTA TGATGATGTC CGAGGCCCTG CTGCAGCTGC
CCATGATGCA GGTATCACCA TCTTCTCTGT TGGTGTGGCT TGGGCACCGC
TGGATGACCT GAGAGATATG GCCTCTAAAC CCAAAGAGTC ACACGCTTTC
TTTACCAGAG AGTTCACAGG GTTAGAACCA ATTGTCTCTG ACGTCATCAG
AGGCATTTGT AGAGACTTCT TAGAATCCCA GCAATAACCG ATACTCTGAC
AACTCAAGGA ATACGTGCAA GGGGATCTAA TGTGCAAATT ATATTCTCAA
TGCCTATGTA ACTTTATAGC TTACCAGTGT CAAAAAATGC GTCCACAGCT
GTTTAAAGCA AATGAATATT CATGTGATGC TCACAATTTA GATTGGCCGA
GACTTGATAA TCAGGCCCTT AGAAACTCAG GAAAGAAGAG TTGTCATGGA
TTAACATTGG GAGTTCAAAT ATGCATTCAA GTGGATAGGT AAGCTACACA
GCTCAATAAA AGAACCTGGC GCTTACACAC AAAGCACTGT TCCCTCTTTA
ATCACTCTGC ATTGACCATG CAAGGAAAAC AGAACAGCTT TTAAACACAG

FIGURE 2 (CONTINUED)

ATCAAGTATA CATATTTTGA CCCATGTGGA TGTTTTCTTA AAACCAGCCA
AGAACAGACA GCTGTTATTA TGTGCACTAG CCATAACTAC ACATTATATG
GAATCATATA TCAAGCTTCT TTTGTAGTGT GTTTTCATAA CTTGATGGCT
GAAATACCAC ACTGAGTAAA GGTAGGATTG CCTGGTATTT TTCTATTTAT
ATCCTTAATT TTATGTGTAT AGACAGGCAT GTACTCCGAG GACTAAGAAA
ATGTTTAAGC AGATAACTTT TTTTTTTTGA AAAAAAAGAT GTGTCAAGTA
TTGTAACCGA AAAAATACAC AGCTTAATAG CTTGGCTGTC AGCAATAAAA
CTGCTAGTGA CTAAG

Mouse Coch-5B2 Amino Acid Sequence

1 MPSSRIPALC LGAWLLLLLL PRFARAEGAV PIPVTCFTRG LDIRKEKADV

LCPGGCSLEE FSVFGNIVYA SVSSICGAAV HRGVIGTSGG PVRVYSLPGR

ENYSSVDANG IQSQMLSRWS ASFAVTKGKS STQEATGRAV STAHPPSGKR

LKKTPEKKTG NKDCKADIAF LIDGSFNIGQ RRFNLQKNFV GKVALMLGIG

TEGPHVGLVQ ASEHPKIEFY LKNFTSAKDV LFAIKEVGFR GGNSNTGKAL

KHTAQKFFTA DTGVRKGIPK VVVVFIDGWP SDDIEEAGIV AREFGVNVFI

VSVAKPIPEE LGMVQDVAFV DKAVCRNNGF FSYHMPNWFG TTKYVKPLVQ

KLCTHEQMMC SKTCYNSVNI AFLIDGSSSV GDSNFRLMLE FVSNIAKTFE

ISDIGAKIAA VQFTYDQRTE FSFTDYNTKE NVLAVLANIR YMSGGTATGD

AIAFTVRNVF GPIRDSPNKN FLVIVTDGQS YDDVRGPAAA AHDAGITIFS

VGVAWAPLDD LRDMASKPKE SHAFFTREFT GLEPIVSDVI RGICRDFLES

QQ*

FIGURE 3

```
  1 MSAAWIPALGLG  VCLLLLPGPAGSEGAAPIAITCFTRGLDIRKEKADV 48
    ...:    .    :          .   .  ::
  1 .PSSR....C..AWLL.....RF.RA...V..PV..............  50

 49 LCPGGCPLEEFSVYGNIVYASVSSICGAAVHRGVISNSGGPVRVYSLPGR 98
        .     :                     :.
 51 ......S......F.....................GT.............  100

 99 ENYSSVDANGIQSQMLSRWSASFTVTKGKSSTQEATGQAVSTAHPPTGKR 148
                                .           .       .
101 ......................A.............R........S...  150

149 LKKTPEKKTGNKDCKADIAFLIDGSFNIGQRRFNLQKNFVGKVALMLGIG 198
151 ..................................................  200

199 TEGPHVGLVQASEHPKIEFYLKNFTSAKDVLFAIKEVGFRGGNSNTGKAL 248
201 ..................................................  250

249 KHTAQKFFTVDAGVRKGIPKVVVVFIDGWPSDDIEEAGIVAREFGVNVFI 298
              . .
251 .........A.T.....................................  300

299 VSVAKPIPEELGMVQDVTFVDKAVCRNNGFFSYHMPNWFGTTKYVKPLVQ 348
                      .
301 .................A................................  350

349 KLCTHEQMMCSKTCYNSVNIAFLIDGSSSVGDSNFRLMLEFVSNIAKTFE 398
351 ..................................................  400

399 ISDIGAKIAAVQFTYDQRTEFSFTDYSTKENVLAVIRNIRYMSGGTATGD 448
                                .       :
401 ........................N........LA.............  450

449 AISFTVRNVFGPIRESPNKNFLVIVTDGQSYDDVQGPAAAAHDAGITIFS 498
    .            :                   .
451 ..A...........D...................R..............  500

499 VGVAWAPLDDLKDMASKPKESHAFFTREFTGLEPIVSDVIRGICRDFLES 548
                :
501 ...........R..................................  550

549 QQ* 550

551 ... 552
```

FIGURE 4

```
COCH-5B2 VA1   D I A F L I D G S F N I G Q R R F N L Q K N F V G K V A L M L G I G T E G P H V G L V Q A S E H P K
COCH-5B2 VA2   N I A F L I D G S S S V G D S N F R L M L E F V S N I A K T F E I S D I G A K I A A V Q F T Y D Q R
COL12A1  VA    D L V F L V D G S W S V G R N N F K Y I L D F I A A L V S A F D I G E E K T R V G V V Q Y S S D T R
CMP      A1    D L V F L I D G S K S V R P E N F E L V K K F I S Q I V D T L D V S D K L A Q V G L V Q Y S S S V R
vWF      A3    D V I L L L D G S S S F P A S Y F D E M K S F A K A F I S K A N I G P R L T Q V S V L Q Y G S I T T

COCH-5B2 VA1  I E F Y L K N F T S A K D V L F A I K E V G F R G G N S N T G K A L K H T A Q K F F T V D A G V R K
COCH-5B2 VA2  T E F S F T D Y S T K E N V L A V I R N I R Y M S G G T A T G D A I S F T V R N V F G P I R E S P N
COL12A1  VA   T E F N L N Q Y Y Q R D E L L A A I K K I P Y K G G N T M T D A - I D Y L V K N T F T E S A G A R V
CMP      A1   Q E F P L G R F H T K K D I K A A V R N M S Y M E K G T M T G A A L K Y L I D N S F T V S S G A R P
vWF      A3   I D V P W N V V P E K A H L L S L V D V M Q R E G G P S Q I G D A L G F A V R Y L T S E M H G A R P

COCH-5B2 VA1  G I P K V V V V F I D G W P S D D I E E A G I V A R E F G V N V F I V S V A K P I P E E L
COCH-5B2 VA2  - - K N F L V I V T D G Q S Y D D V Q G P A A A A H D A G I T I F S V G V A W A P L D D L K D M A S
COL12A1  VA   G F P K V A I I I T D G K S Q D E V E I P A R E L R N V G V E V F S L G I K A A D A K E L K Q I A S
CMP      A1   G A Q K V G I V F T D G R S Q D Y I N D A A K K A K D L G F K M F A V G V G N A V E D E L
vWF      A3   G A S K A V V I L V T D V S V D S V D A A D A A R S N R V T V F P I G I
```

FIGURE 5

FIGURE 6

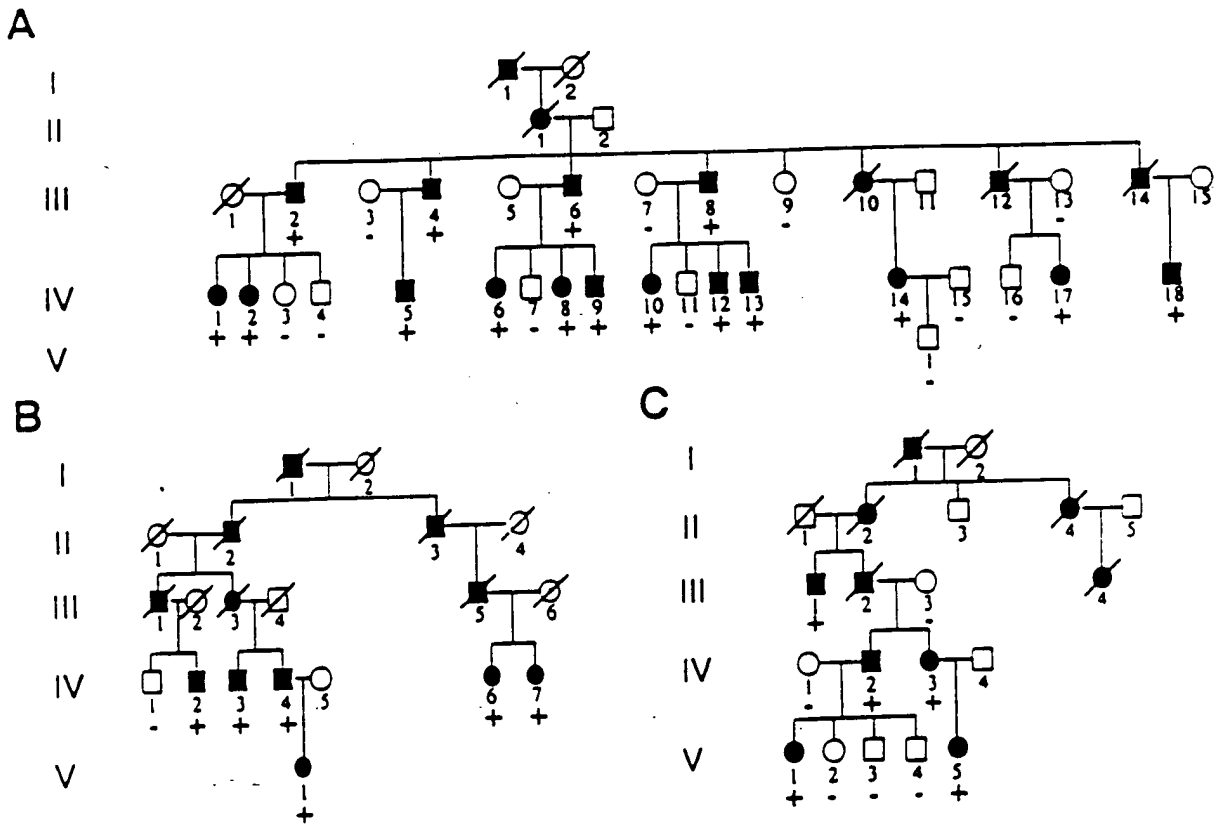

FIGURE 7

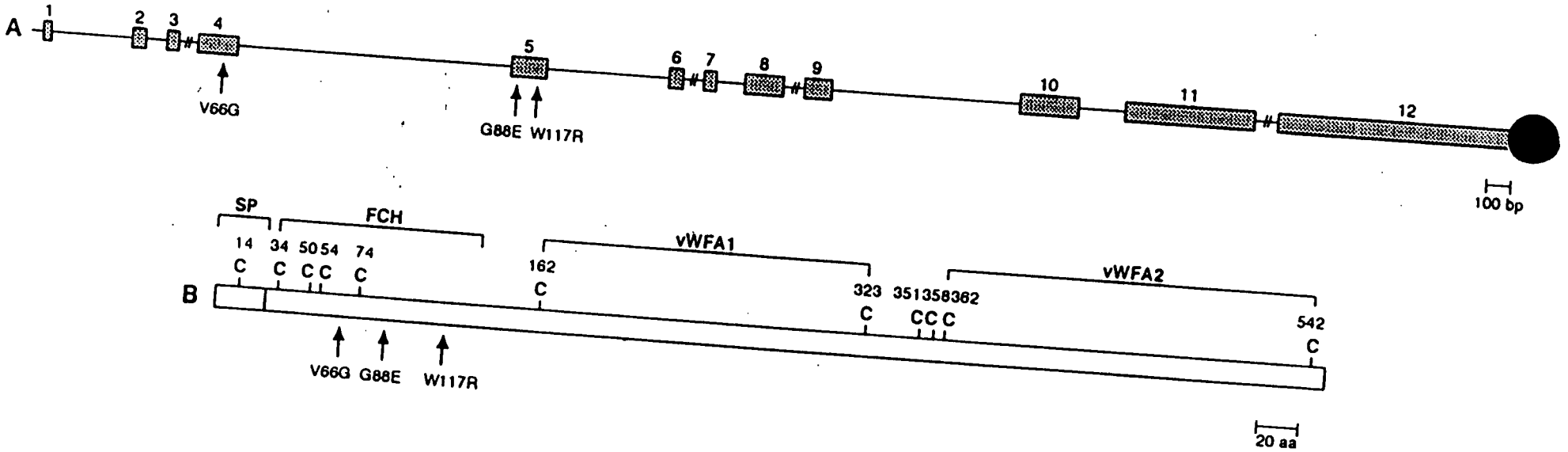
A
1
2
3
4
5
6
7
8
9
10
11
12
V66G
G88E
W117R
100 bp
B
SP
FCH
vWFA1
vWFA2
14
34
50
54
74
162
323
351
358
362
542
C
V66G
G88E
W117R
20 aa

FIGURE 7 (CONTINUED)

C